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(54) Title: SYSTEM AND METHOD FOR THE TREATMENT OF CANCER, INCLUDING CANCERS OF THE CENTRAL **NERVOUS SYSTEM**

(57) Abstract: The invention relates to the treatment of cancer, and particularly to the treatment of cancers of the central nervous system, such as glioblastoma multiforme. A dual therapeutic approach is provided, including the administration of a dendritic cellbased cancer vaccine and a regimen of chemotherapy. The two therapies may be administered concurrently with one another and/or with an initial vaccination preceding chemotherapy. In various embodiments, the dendritic cell-based cancer vaccine includes either primed or unprimed dendritic cells; for instance, the dendritic cells may be autologous tumor antigen-presented dendritic cells. The dual therapeutic approach of the instant invention beneficially influences the chemosensitivity of a mammal with cancer.

